AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Currently Amended) A reamer for reaming a bone or a cartilage, or a combination thereof, during surgery, wherein the reamer includes a hollow body comprising an exterior surface and a rim, the exterior surface of the hollow body comprising a first portion and at least one second portion,

the first portion of the exterior surface of the hollow body dimensioned substantially as a surface of rotation about a rotational axis, and comprising a plurality of raised edges for cutting the bone or the cartilage or the combination thereof, and a plurality of openings for passing of fragments of the bone or the cartilage or the combination thereof into an interior of the hollow body, and

the at least one second portion forming at least one generally planar exterior surface of the hollow body that extends substantially close to the rim of the reamer so as to capture fragments of the bone or the cartilage or the combination thereof into the interior of the hollow body, ~~the at least one second portion being free of any raised edges for cutting the bone or the cartilage or the combination thereof and free of openings for passing of fragments of the bone or cartilage or the combination thereof into the interior of the hollow body~~,

wherein the raised edges are confined to the first portion of the exterior surface of the hollow body, and

wherein the first portion of the exterior surface of the hollow body includes a peripheral edge that forms at least a portion of a first arc, and wherein an intersection of the first portion and the at least one second portion forms a second arc that extends continuously from one point on the peripheral edge of the first portion to another point on the peripheral edge of the first portion.

2. (Cancelled)

3. (Previously Presented) The reamer of Claim 1, wherein the at least one second portion is oriented in a plane substantially parallel to the rotational axis.

4. (Currently Amended) The reamer of Claim 1 [[2]], including two second portions.

5. (Original) The reamer of Claim 4, wherein the two second portions are located in planes substantially parallel to one another.

6. (Cancelled)

7. (Cancelled)

8. (Original) The reamer of Claim 1, wherein the surgery is a hip replacement arthroplasty and the bone and the cartilage are the acetabulum of an animal or a human.

9. (Currently Amended) A reamer for reaming a bone or a cartilage, or a combination thereof, during surgery, wherein the reamer includes a hollow body of a general dome shape comprising a generally dome-shaped exterior surface, the generally dome-

shaped exterior surface of the hollow body comprising a first portion and at least one second portion,

wherein the first portion of the generally dome-shaped exterior surface of the hollow body comprises a plurality of raised edges for cutting the bone or the cartilage or the combination thereof and a plurality of openings for passing of fragments of the bone or the cartilage or the combination thereof into an interior of the hollow body, the raised edges comprising a lip configured to capture fragments of the bone or cartilage or the combination thereof and to direct those fragments through the openings into the interior of the hollow body,

wherein the raised edges are confined to an area of the first portion in a band straddling a middle portion of the generally dome-shaped exterior surface of the hollow body, and

wherein the at least one second portion forms a portion of the dome-shaped exterior surface ~~that has no raised edges or openings~~.

10. (Previously Presented) The reamer of Claim 9, wherein the first portion of the generally dome-shaped exterior surface of the hollow body occupies substantially less than half of the hollow body exterior surface.

11. (Cancelled)

12. (Previously Presented) The reamer of Claim 9, wherein the surgery is a hip replacement arthroplasty and the bone and the cartilage are in the acetabulum of an animal or a human.

13 – 24. (Cancelled)

25. (Currently Amended) A reamer for reaming a bone or a cartilage, or a combination thereof, during surgery, comprising a hollow dome comprising an exterior surface, the exterior surface of the hollow dome comprising a first portion and at least one second portion,

the first portion of the exterior surface of the hollow dome dimensioned substantially as a surface of rotation about a rotational axis and comprising a plurality of raised edges for cutting the bone or the cartilage or the combination thereof, and a plurality of openings for passing of fragments of the bone or the cartilage or the combination thereof into an interior of the hollow dome, the raised edges comprising a lip configured to capture fragments of the bone or cartilage or the combination thereof and to direct those fragments through the openings into the interior of the hollow dome,

the at least one second portion forming at least one generally planar exterior surface of the hollow dome, ~~the at least one second portion being free of any raised edges for cutting the bone or the cartilage or the combination thereof~~

wherein the raised edges are confined to the first portion of the exterior surface of the hollow dome.

~~wherein the first portion of the exterior surface of the hollow dome includes a peripheral edge that forms at least a portion of a first arc, and wherein an intersection of the first portion and the at least one second portion forms a second arc that extends continuously from one point on the peripheral edge of the first portion to another point on the peripheral edge of the first portion.~~

26. (Currently Amended) The reamer of Claim 25, wherein the at least one second portion [[is]] substantially enclose[[d]]s the hollow dome.

27. (Currently Amended) A reamer for reaming a bone or a cartilage, or a combination thereof, during surgery, comprising a generally dome-shaped hollow body, the body comprising an exterior surface comprising a first portion and at least one second portion,

the first portion of the generally dome-shaped hollow body dimensioned substantially as a surface of rotation about a rotational axis, and comprising a plurality of raised edges for cutting the bone or the cartilage or the combination thereof, and a plurality of openings for passing of fragments of the bone or the cartilage or the combination thereof into an interior of the generally dome-shaped hollow body, the raised edges comprising a lip configured to capture fragments of the bone or cartilage or the combination thereof and to direct those fragments through the openings into the interior of the generally dome-shaped hollow body,

the at least one second portion forming at least one generally planar exterior surface of the generally dome-shaped hollow body, ~~the at least one second portion being free of any raised edges for cutting the bone or the cartilage or the combination thereof~~,

wherein the raised edges are confined to the first portion of the exterior surface of the generally dome-shaped hollow body.

~~wherein the first portion of the exterior surface of the generally dome-shaped hollow body includes a peripheral edge that forms at least a portion of a first arc, and wherein an intersection of the first portion and the at least one second portion forms a second arc that extends continuously from one point on the peripheral edge of the first portion to another point on the peripheral edge of the first portion.~~

28. (Currently Amended) The reamer of Claim 27, wherein the at least one second portion of the generally dome-shaped hollow body [[is]] substantially enclose[[d]]s the hollow body.

29. (Currently Amended) A reamer for reaming a bone or a cartilage, or a combination thereof, during surgery, wherein the reamer comprises a hollow dome comprising an exterior surface, the exterior surface comprising a first portion and at least one second portion,

wherein the first portion of the exterior surface of the hollow dome comprises a plurality of raised edges for cutting the bone or the cartilage or the combination thereof, and a plurality of openings for passing of fragments of the bone or the cartilage or the combination thereof into an interior of the hollow dome, the raised edges comprising a lip configured to capture fragments of the bone or cartilage or the combination thereof and to direct those fragments through the openings into the interior of the hollow dome,

wherein the raised edges are confined to an area of the first portion in a band straddling a middle portion of the exterior surface of the hollow dome, and

wherein the at least one second portion forms a portion of the exterior surface of the hollow dome ~~that has no raised edges or openings~~.

30. (Currently Amended) The reamer of Claim 29, wherein the at least one second portion is substantially enclosed.

31. (Previously Presented) The reamer of Claim 29, wherein the first portion of the exterior surface of the hollow dome occupies substantially less than half of the hollow dome exterior surface.

32. (Currently Amended) A reamer for reaming a bone or a cartilage, or a combination thereof, during surgery, wherein the reamer comprises a generally dome-shaped hollow body, the hollow body comprising an exterior surface comprising a first portion and at least one second portion,

wherein the first portion of the exterior surface of the generally dome-shaped hollow body comprises a plurality of raised edges for cutting the bone or the cartilage or the combination thereof, and a plurality of openings for passing of fragments of the bone or the cartilage or the combination thereof into an interior of the generally dome-shaped hollow body, the raised edges comprising a lip configured to capture fragments of the bone or cartilage or the combination thereof and to direct those fragments through the openings into the interior of the generally dome-shaped hollow body,

wherein the raised edges are confined to an area of the first portion in a band straddling a middle portion of the exterior surface of the generally dome-shaped hollow body, and

wherein the at least one second portion forms a portion of the exterior surface of the generally dome-shaped hollow body ~~and has no raised edges or openings~~.

33. (Currently Amended) The reamer of Claim 32, wherein the at least one second portion of the exterior surface of the generally dome-shaped hollow body [[is]] substantially enclose[[d]]s the hollow body.

34. (Currently Amended) The reamer of Claim 32, wherein the first portion of the exterior surface of the generally dome-shaped hollow body occupies substantially less than half of the exterior surface of the generally dome-shaped hollow body.

35. (Currently Amended) A reamer for reaming a bone or a cartilage, or a combination thereof, during surgery, wherein the reamer includes a hollow body, the hollow body comprising a rim and an exterior surface comprising a first portion and at least one second portion,

the first portion of the exterior surface of the hollow body dimensioned substantially as a surface of rotation about a rotational axis, and comprising a plurality of raised edges for cutting the bone or the cartilage or the combination thereof, and a plurality of openings for passing of fragments of the bone or the cartilage or the combination thereof into the interior of the hollow body,

the at least one second portion forming at least one generally planar exterior surface of the hollow body that extends substantially close to the rim of the reamer so as to capture fragments of the bone or the cartilage or the combination thereof into the interior of the hollow body, ~~the at least one second portion being free of any raised edges for cutting the bone or the cartilage or the combination thereof~~,

wherein the raised edges are confined to the first portion of the exterior surface of the hollow body, and

wherein the first portion of the exterior surface of the hollow body includes a peripheral edge that forms at least a portion of a first arc, and wherein an intersection of the first portion and the at least one second portion forms a second arc that extends continuously from one point on the peripheral edge of the first portion to another point on the peripheral edge of the first portion, and where

the at least one second portion of the exterior surface of the hollow body [[is]] substantially enclose[[d]]s the hollow body.

36. (Currently Amended) A reamer for reaming a bone or a cartilage, or a combination thereof, during surgery, wherein the reamer includes a hollow body of a general dome shape, the hollow body comprising a generally dome-shaped exterior surface, the generally dome-shaped exterior surface of the hollow body comprising a first portion and at least one second portion,

wherein the first portion of the generally dome-shaped exterior surface of the hollow body comprises a plurality of raised edges for cutting the bone or the cartilage or the combination thereof, and a plurality of openings for passing of fragments of the bone or the cartilage or the combination thereof into the interior of the hollow body, the raised edges comprising a lip configured to capture fragments of the bone or cartilage or the combination thereof and to direct those fragments through the openings into the interior of the hollow body,

wherein the raised edges are confined to an area of the first portion in a band straddling a middle portion of the generally dome-shaped exterior of the hollow body, and

wherein the at least one second portion forms a portion of the dome-shaped exterior surface ~~that has no cutting edges or openings~~, and wherein the at least one second portion [[is]] substantially enclose[[d]]s the hollow body.

37. (Currently Amended) A reamer for reaming a bone or a cartilage or a combination thereof, during surgery, wherein the reamer includes a cup-shaped hollow body generally formed as a section of a dome portion or as a truncated dome portion, the hollow body comprising a dome-shaped exterior surface and an open end and a substantially closed end to define an interior volume that is spatially bounded by:

(a) a first portion of the dome-shaped exterior surface comprising a plurality of raised edges for cutting the bone or the cartilage or the combination thereof, and a plurality of openings for passing of fragments of the bone or the cartilage or combination thereof into the interior volume of the hollow body, the raised edges comprising a lip configured to capture fragments of the bone or cartilage or the combination thereof and to direct those fragments through the openings into the interior volume of the hollow body, and

(b) at least one second portion of the dome-shaped exterior surface that intersects with the first portion, wherein the at least one second portion has no raised edges for cutting the bone or the cartilage or the combination thereof or openings for passing of fragments of the bone or the cartilage or combination thereof into the interior volume of the hollow body, and

wherein, in use, the at least one second portion generally serves to maintain the fragments of bone or cartilage or the combination thereof within the interior volume of the hollow body,~~; and~~

~~wherein the first portion of the dome-shaped exterior surface includes a peripheral edge that forms at least a portion of a first arc, and wherein an intersection of the first portion and the at least one second portion forms a second arc that extends from one point on the peripheral edge of the first portion to another point on the peripheral edge of the first portion.~~

38. (Previously Presented) The reamer of Claim 37, wherein the dome-shaped exterior surface is a spheroidal, ellipsoidal, or spherical exterior surface.

39. (Currently Amended) A reamer for reaming a bone or a cartilage or a combination thereof, during surgery, wherein the reamer includes a cup-shaped hollow body generally formed as a section of a dome portion or as a truncated dome portion, the hollow body comprising an exterior surface and an open end and a substantially closed end to define an interior volume that is spatially bounded by:

(a) a first portion on the exterior surface dimensioned substantially as a surface of rotation about a rotational axis comprising a plurality of raised edges for cutting the bone or the cartilage or the combination thereof, and a plurality of openings for passing of fragments of the bone or the cartilage or combination thereof into the interior volume of the hollow body, the raised edges comprising a lip configured to capture fragments of the bone or cartilage or the combination thereof and to direct those fragments through the openings into the interior volume of the hollow body, and

(b) at least one second portion on the exterior surface that intersects with the first portion,

wherein, in use, the at least one second portion is configured to maintain the fragments of bone or cartilage or the combination thereof within the interior volume of the hollow body, and

wherein the raised edges are confined to an area of the first portion in a band straddling a middle portion of the exterior surface of the cup-shaped hollow body.

40. (Previously Presented) The reamer of Claim 39, wherein the exterior surface is a spheroidal, spherical, or ellipsoidal surface.